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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,392

12/30/2003

Atika El Sayed

GEI-096-1

8971

47888

7590

11/22/2006

HEDMAN & COSTIGAN P.C.
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

DHARIA, PRABODH M

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,392

Applicant(s)

SAYED ET AL.

Examiner

Prabodh M. Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02-05-04</u> . | 6) <input type="checkbox"/> Other: _____ |

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 120, a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) is included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference has also included the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. Applicant has complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 02-05-2004 was filed after the mailing date of the application on 12-30-2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because is not in narrative form, it has more than one paragraph and total word count exceeds 150. Correction is required. See MPEP

§ 608.01(b).

5. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

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6. The disclosure is objected to because of the following informalities: Items f and g listed above are not identified properly in the disclosure.

Appropriate correction is required.

Response to Amendment

7. The amendment filed 12-30-2003 does not introduces new matter into the disclosure. The added material simply corrects claim dependencies and applicant has added a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) and a specific reference is included in the first sentence(s) of the specification following the title. Please all the replies and correspondence should be addressed t examine4r's new art unit 2629.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spitzer (US 6,384,982 B1) in view of Parker et al. (US 6,906,836 B2).

Regarding Claim 1, Spitzer teaches a device for the diffusion (Col. 11, Lines 59-62, it is well known in the art opaque covers is a diffusive device) of virtual images (Col. 16, Lines 46-

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49) into a user's visual field (Col. 6, Lines 47-56), superposed onto his perception of ambient images of the environment in which he finds himself (Col. 6, Lines 47-56), said device comprising virtual image diffusion means in relation to remote image-producing source said virtual image diffusion means being attached to a facial mounting and combining a unit for displaying the virtual image produced and an optical system for resending towards the user's pupil, virtual images displayed by the display unit (Col. 6, Lines 47-56, Col. 16, Lines 46-49, Col. 11, Lines 59-62) said optical system comprising at least one mirror reflecting the virtual images displayed by the display unit towards a terminal lens for projecting the reflected images (Col. 11, Lines 20-43), the whole assembly achieving complete integration in a spectacle mounting said display unit is oriented transversally to the frontal direction D of the user's vision (see figure 12, figure s 6A, 6B, Col. 8, lines 50-52, Col. 11, Lines 20-45) and transversally to a plane orthogonal to this direction D (see figure 12, figure s 6A, 6B, Col. 8, lines 50-52, Col. 11, Lines 20-45), the display unit mirror and terminal lens composing the virtual image diffusion means being attached laterally to the facial mounting while being oriented in relation to each other in order to form a prism (see figures 26,27, Col. 14, Line 48 to Col. 15, Line 10), the edges of which are approximately defined by their edges, in order to allow a biased diffusion towards the user's pupil of the virtual images projected by terminal lens, from a lateral zone of the mounting in which zone the virtual image diffusion means are assembled (see figures 26,27, Col. 14, Line 48 to Col. 15, Line 10, Col. 12, line 56 to Col. 13, Line 9, Col. 19, Lines 27-48, reflective LCD has a diffusive surface).

However, Spitzer fails to recite or disclose specifically the virtual image diffusion means are assembled.

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However, Parker et al. teaches the virtual image diffusion means are assembled (see figure 5, Col. 10, Lines 49-59, Col. 11, Lines 5-22, 42-48).

The reason to combine is to have a display with a optical efficiency, a virtual image with high resolution and generating a virtual image in the field of view of an observer along with an ambient image with sufficient brightness.

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Parker et al. teaching in teaching of Spitzer to be able to have a display with a optical efficiency, a virtual image with high resolution; generating a virtual image in the field of view of an observer along with an ambient image with sufficient brightness and avoid blurring providing a virtual image at a distance much larger than presently achievable.

Regarding Claim 2, Spitzer teaches the display unit, the mirror and the terminal lens are together carried by a chassis attached to the mounting via means of mobility (see figures 23-25, Col. 14, Lines 38-47), such that the mounting is equipped with means for adjusting the position of the image projected towards the user's pupil, stating from a displacement of the whole assembly composing the virtual image diffusion means (see figures 23-27, Col. 14, Line 38 to Col. 15, Line 10, Col. 12, Line 56 to Col. 13, Line 9, Col. 19, Lines 27-48).

Regarding Claim 3, Spitzer teaches the chassis is arranged in an envelope inside which the display unit, the mirror and the terminal lens are attached, such that the chassis is arranged in a dark chamber inside which the units composing the virtual image diffusion means are

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assembled in proximity to one another (see figures 23-31, Col. 14, Line 38 to Col. 15, Line 10, Col. 12, Line 56 to Col. 13, Line 21, Col. 16, Line 58 to Col. 17, Line 14, Col. 19, Lines 27-48).

Regarding claim 4, Spitzer teaches the dark chamber is composed of two half-shells joined together by interlocking, and which accommodate between them the display unit, mirror at lens (see figure 15-18, Col. 13, Lines 1-40, see figure 29-31, Col. 16, Line 58 to Col. 17, Line 14), the whole forming a dark chamber comprising clearances to allow respectively the lateral emergence of the lens and access to the rear surface of the display screen with a view to its connection to the remove image-producing source (figures 15-18 Col. 13, Lines 1-59, see figure 32-34, Col. 17, Line 15 to Col. 18, Line 12)

10. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spitzer (US 6,384,982 B1) in view of Parker et al. (US 6,906,836 B2) as applied to claims 1-4 above, and further in view of Spitzer (US 5,886,822).

Regarding Claim 5-10 Spitzer teaches the means of mobility of the chassis on the facial mounting comprising a control arm arranged as a telescopic unit, on which telescopic control the chassis is mounted in a pivoting manner the chassis being moreover mounted in a pivoting manner on the mounting such that the means for adjusting the position on the image projected towards the user's pupil are constituted by the telescopic arm for control of the chassis, and by the pivoting guiding of the chassis on the mounting and the terminal lens is equipped with means for adjusting its focal length (see figures 29-34, Col. 15, Line 46-67, Col. 16, Lines 33-57) Col.

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17, Line 40 to Col. 18, Line 12) and the support unit is arranged in a case made of two half-shells joined together by interlocking, in order to envelope the chassis carrying the virtual image diffusion means and its means of mobility (see figure 22, Col. 15, Lines 8-41) and the mounting being a pair of spectacles, the means for connecting the case to the mounting are constituted by a lateral opening made in one of the spectacle eyeglass, in order to receive by sliding interlocking the case, itself provided with slides for receiving the lower and upper edges of the opening (see figures 23-25, Col. 14, Lines 38-47).

However, Spitzer (6,384,982) modified by Parker et al. fails to recite or disclose telescopic control.

However, Spitzer (5,886,822) teaches telescopic control and the telescopic control arm is principally constituted by a toothed wheel mounted in a turning manner on the facial mounting and by a finger circulating in translation inside the toothed wheel by screwing, the finger carrying the chassis pivoting at its terminal end and the terminal lens is equipped with means for adjusting its focal length (see figure 15, item # 621-623, also see figure 5B, Col. 10, Line 44 to Col. 11, Line 4).

The reason to combine is to add magnification to the display or to correct the vision of the user and by the user in the manner of conventional eyeglasses.

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Spitzer (5,886,822) in teaching of Spitzer (6,384,982) modified by Parker et al. to be able to have a see through, see around, or full-immersion display with a optical efficiency, to add magnification to the display or to correct the vision of the user and by the user

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in the manner of conventional eyeglasses, without having any mechanical appendages in front of the user's eyes that could cause eye damage.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jiang et al. (US 2004/0008412 A1) Real image configuration for a high efficiency heads-up display (HUD) using a polarizing mirror and a polarization preserving screen..

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668. The examiner can normally be reached on M-F 8AM to 5PM.

13. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

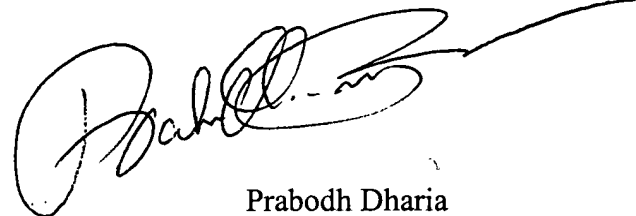
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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

A handwritten signature in black ink, appearing to read 'Prabodh Dharia', with a long horizontal flourish extending to the right.

Prabodh Dharia

Partial Signatory Authority Program

AU2629

November 19, 2006